NEW SHEET

Fig. 1

```
                        ┌──────────┐
                        │  Start   │
                        └──────────┘
                             │
                             ▼
┌─────┐   ┌─────────────────────────────────┐
│ 110 │   │ Determine Vehicle Force from:   │
└─────┘   │   F_motor 112,                  │
          │   F_rot 114,                    │
          │   F_air resistance 116,         │
          │       and                       │
          │   F_brake 118                   │
          └─────────────────────────────────┘
                             │
                             ▼
┌─────┐   ┌─────────────────────────────────┐
│ 120 │   │ Determine Vehicle Acceleration  │
└─────┘   │ from:                           │
          │   Time differential of vehicle  │
          │      speed 122,                 │
          │   Roadway gradient angle 124,   │
          │      and                        │
          │   Coefficient of rolling        │
          │      resistance 126             │
          └─────────────────────────────────┘
                             │
                             ▼
┌─────┐   ┌─────────────────────────────────┐
│ 130 │   │ Determine an Estimated Vehicle  │
└─────┘   │ Mass from:                      │
          │                                 │
          │   Determinved Vehicle Force 110 │
          │      divided by                 │
          │   Determined Vehicle            │
          │      Accelleration 120          │
          └─────────────────────────────────┘
                             │
                             ▼
┌─────┐   ┌─────────────────────────────────┐
│ 140 │   │ Store the Estimated Vehicle     │
└─────┘   │ Mass 130 and Condition          │
          │ Weighting Factors 142           │
          └─────────────────────────────────┘
                             │
                             ▼
┌─────┐   ◇─────────────────────◇
│ 150 │   │ Is at least one       │    No
└─────┘   │ Estimated Vehicle     │─────────►
          │ Mass in storage?      │
          ◇─────────────────────◇
                    │
                   Yes
```

F_{motor} 112,
F_{rot} 114,
$F_{air\ resistance}$ 116,
F_{brake} 118

┌─────┐
│ 160 │
└─────┘

Weight stored Estimated Vehicle Mass values by their respective condition weighting factors, and determine a Weighted Estimated Vehicle Mass 162